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August 20, 2001

Kevin Turner-Environmental Scientist, OSC  
U. S. Environmental Protection Agency  
c/o Crab Orchard National Wildlife Refuge  
8588 Rt. 148  
Marion, IL 62959

**Re: Sauget Sites Area I - May 31, 2000 Unilateral Administrative Order (UAO)  
Sediment / Soils Removal Action**  
• **Post Removal Sampling Requirements – Request for change**

Dear Mr. Turner,

The 5/31/00 Sediment Removal UAO ("UAO") requires post removal sampling of the creek channel for Sectors B through E (at Rt. 157) every 100 feet, 3 samples per transect<sup>1</sup>. "The post removal sampling results will be used in the Area One EE/CA and RI/FS processes to determine what, if any, excavated areas in addition to CS-B may require further remediation under the EE/CA process."<sup>2</sup> The total number of samples that would be collected and analyzed under the UAO protocol to make this determination is 255 (8500 Linear feet / 100 ft. per transect x 3 samples per transects).

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<sup>1</sup> Section 1.5 of the UAO, **4. Excavated Area Soil Sampling:** After the sediment and soils removal has taken place, Respondents shall collect soil samples from, at a minimum, all excavated areas of CS-B, C, D and E at 100 ft. intervals (to be referred to as "transects"), starting at the upstream end of the channel at Queeny Road and terminating near the downstream end of the channel at Route 3. Each creek transect, and sample location, shall be identified and numbered for reference purposes. Sampling at each creek transect shall occur at a frequency of no less than 3 samples per transect. Of the 3 samples, one shall be located at the transect center line and the other two shall be located equidistant to the center and the edge of the excavation area. Due to the fact that soils leaching to groundwater is the primary concern, bottom soil samples shall be extracted using TCLP and analyzed for Total Compound List/Total Analyte List (TCL/TAL) parameters and dioxin/furans.

Soil samples shall be collected from the bottom of Site M at 100 ft. grid intervals covering the entire excavated area. Pond bottom soils will be extracted using the TCLP and analyzed for TCL/TAL parameters and dioxin/furans.

<sup>2</sup> 5/31/00 Sediment Removal UAO Section **I. JURISDICTION AND GENERAL PROVISIONS**

The Support Sampling Plan approved for the 1/21/99 AOC for the Area I EECA / RIFS ("AOC") required a total of 20 samples for the entire length of the creek (Sectors B through Sector F) to determine if any unacceptable risks existed as a result of the creek sediments (single samples every 1000 feet)<sup>3</sup>. The sediment-sampling requirement under the AOC was waived because the subsequent UAO required removal of the creek sediments. As you are aware, removal of creek sediments is now in progress for Sectors B, C, D & E. In addition, removal of creek sediments from Sector F is the subject of a proposed UAO modification.

The UAO requirement of 255 samples is far in excess of what will be needed to evaluate residual risks of the underlying soils in the creek channel. At an estimated cost of \$2500 per sample (sampling, analysis & QA/QC), the post removal sampling cost would total over \$600K for Sectors B, C, D & E. Sector F would add an additional half million dollars under the current UAO protocol. I believe the 100-foot transect interval for post removal sampling of the creek originated from the Site M post removal sampling protocol.- which was a 100 ft. grid. The 100-foot transect interval was then carried over into the post removal sampling protocol for the entire creek.

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<sup>3</sup> AOC Section 3.2.3 Soils and Sediments

**Sediment Sampling Plan, Extent and Depth of Contamination in Sediments**

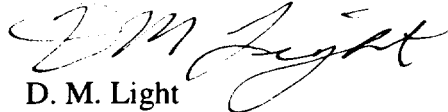
**Broad Scan Analyses** - Vertically-integrated sediment samples will be collected every 1000 ft. in Dead Creek, from the upstream end of Creek Sector B to the downstream end of Creek Sector F at the Old Prairie duPont Creek lift station, to determine the extent of downstream migration of TCL/TAL constituents (Figure 5). Two sediments samples will be collected in the borrow pit lake in Creek Sector F upstream of the discharge of Dead Creek to assess the effect of backwater conditions and/or the contributions of other sources. One sample will be collected upstream and one sample will be collected downstream of the confluence of Dead Creek and Old Prairie duPont Creek to determine the impact of the Dead Creek discharge on sediment quality in Old Prairie duPont Creek.

Samples will be collected in depositional areas at the thickest sediment profile. Channel cross section will be surveyed at each sampling station and sediment depth will be measured at three (3) locations perpendicular to the channel (channel center and half way between channel center and right channel edge and half way between channel center and left channel edge. All sampling locations will be selected in the field with the concurrence of the USEPA or its designee. A sign off sheet will be used to record the fact that the Agency, or its designee, approved each sampling station location.

Pursuant to the Modification process outlined in the UAO<sup>4</sup>, Solutia requests approval of the attached alternative post removal sampling plan.

Thank you for your consideration of this modification proposal.

Sincerely,



D. M. Light  
Manager, Remedial Projects  
Solutia Inc.

cc:

Michael McAteer – USEPA  
Michael Ribordy - USEPA

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<sup>4</sup> From Section XI. "MODIFICATIONS" of the UAO:

Modifications to any plan or schedule may be made in writing by the OSC or at the OSC's oral direction. If the OSC makes an oral modification, it will be memorialized in writing within seven (7) business days; however, the effective date of the modification shall be the date of the OSC's oral direction. The rest of the Order, or any other portion of the Order, may only be modified in writing by signature of the Director, Superfund Division, Region 5.

If Respondents seek permission to deviate from any approved plan or schedule, Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis.

No information advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondents shall relieve Respondents or their obligations to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

## **Proposed Post Removal Sampling Plan**

- 1) CS-B (1800')
  - Composite of 3 aliquots<sup>5</sup> per transect (for VOCs – analyze sample with highest PID)
  - Transect each 100 feet
  - Broad scan analysis each 500 feet (4 total)
  - PCBs, Copper & Zinc each 100 feet
- 2) CS-C & CS-D (1300' & 1100' respectively)
  - Composite of 3 aliquots per transect (for VOCs – analyze sample with highest PID)
  - Transect each 100 feet
  - Broad scan analysis each 500 feet (6 total)
  - PCBs, Copper & Zinc each 100 feet
- 3) CS-E (4300')
  - Composite of 3 aliquots per transect (for VOCs – analyze sample with highest PID)
  - Transect each 500 feet
  - Broad scan analysis each 1000 feet (5 total)
  - PCBs, Copper & Zinc each 500 feet
- 4) CS-F (6500')
  - Composite of 3 aliquots per transect (for VOCs – analyze the sample with the highest PID)
  - Transect each 500 feet
  - Broad scan analysis each 1000 (7 total)
  - PCBs, Copper & Zinc each 500 feet

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<sup>5</sup> See Note 1 for sampling protocol for 3 samples.